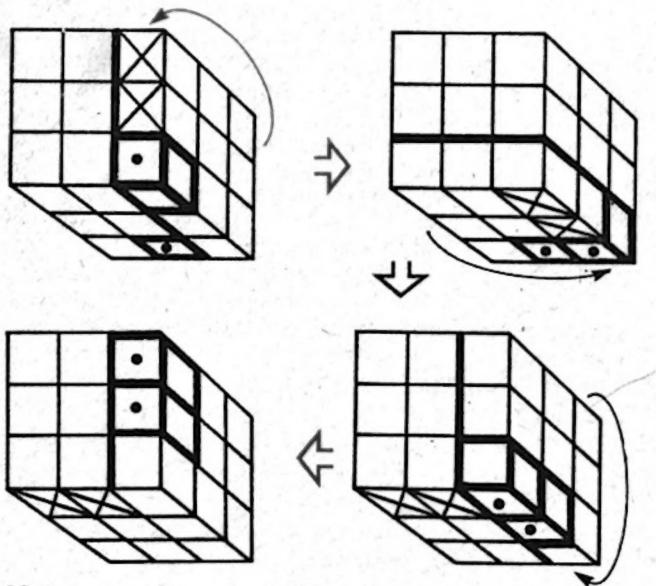
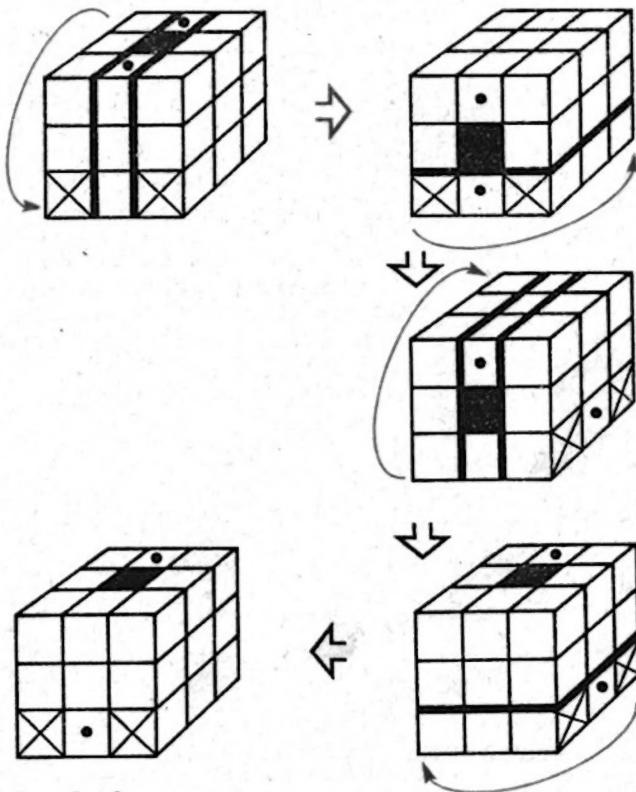


- Do not concern yourself with cubes that must be placed at later steps while working on earlier steps. For example, while completing the top face, don't worry at all about what happens to cubes on the bottom face. No matter how badly the cubes involved in later steps are scrambled, it will always be possible to place and orient them properly when their turn comes. There are no "dead ends."
- Simple 3-turn sequences of the type shown below are basic to steps 2-4 of the solution. You simply rotate one of the side faces one quarter turn in either direction, then rotate the bottom face, and then reverse your first rotation. The sequences of moves required to accomplish steps 2-4 are just combinations of 3 move sequences of this type. The sequence shown below changes one top corner and one vertical-edge cube without disturbing the other top-edge, top-corner, and vertical-edge cubes. A great deal can be accomplished by just performing various combinations of these sequences.



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- The simple 4-move sequence shown below allows you to manipulate edge cubes without disturbing any of the corner cubes. Combinations of sequences of this type are most useful in step 5 but can be used in earlier steps (1 and 3).



### Last chance

If you wish, you may try to solve the puzzle with only the foregoing information. The remaining pages describe a complete and certain solution for any starting arrangement of the cube. Reading them might destroy the enjoyment of working out a solution yourself with just the few hints already provided.

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